

USER'S GUIDE

RP-9990



DOLBY PROLOGIC
AMPLIFIER IN A SUBWOOFER

TRENT

IMPORTANT INFORMATION REQUIRED BY FEDERAL COMMUNICATIONS COMMISSION CONCERNING RADIO FREQUENCY INTERFERENCE

This device generates and uses radio frequency (RF) energy, and if not installed and used properly, this equipment may cause interference to radio and television reception.

This equipment has been type tested and found to comply with the limits for a Class B Computing Device in accordance with the specifications in Subpart J of Part 15 of FCC Rules. These rules are designed to provide reasonable protection against radio and television interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause interference to radio or television reception (which you can determine by turning the equipment off and on), try to correct the interference by one of more of the following measures:

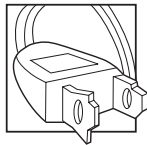
- Reorient the receiving antenna (that is, the antenna for the radio or television that is "receiving" the interference).
- Move the unit away from the equipment that is receiving interference.
- Plug the unit into a different wall outlet so that the unit and the equipment receiving interference are on different branch circuits.

If these measures do not eliminate the interference, please consult your dealer or an experienced radio/television technician for additional suggestions. Also, the Federal Communications Commission has prepared a helpful booklet, "How To Identify and Resolve Radio TV Interference Problems." This booklet is available from the U.S. Government Printing Office, Washington, DC 20402. Please specify stock number 004-000-0345-4 when ordering copies.

PRECAUTIONS

- **Never open the cabinet** under any circumstances. Never operate this product with the cabinet removed. Any repairs or internal adjustments should be made only by a trained service technician.
- **Do not touch the pick-up lens** which is located inside the disc compartment. Also, to keep dust from collecting on the pick-up lens, do not leave the compartment door open for an extended period of time. If the lens becomes dirty, clean it with a soft brush, or use an air blower brush designed for camera lenses.
- **Do not touch the player with wet hands.** If any liquid enters the player cabinet, take the player to a trained service technician for inspection.
- **This Compact Disc Player uses a laser** to read the music on the disc. The laser mechanism corresponds to the cartridge and stylus of a traditional record player. Although this product incorporates a laser pick-up lens, it is completely safe when operated according to directions.

FOR YOUR SAFETY



The AC power plug is polarized (one blade is wider than the other) and only fits into AC power outlets one way. If the plug won't go into the outlet completely, turn the plug over and try to insert it the other way. If it still won't fit, contact a qualified electrician to change the outlet, or use a different one. Do not attempt to bypass this safety feature.

IMPORTANT BATTERY INFORMATION

- If you're not going to use your remote control for a month or more, be sure to remove batteries because they can leak and damage the unit.
- Dispose of batteries in the proper manner, according to federal, state, and local regulations.
- Any battery may leak electrolyte if mixed with a different battery type, if inserted incorrectly, if all batteries are not replaced at the same time, if disposed of in fire, or if an attempt is made to charge a battery not intended to be recharged.
- Discard leaky batteries immediately. Leaking batteries can cause skin burns or other personal injury.

SERVICE INFORMATION

This product should be serviced only by those specially trained in appropriate servicing techniques.

FOR YOUR RECORDS

In the event that service should be required, you may need both the Model number and the serial number. In the space below, record the date and place of purchase, and the serial number:

Model No. RP-9990

Date of Purchase _____

Place of Purchase _____

Serial No. _____

WARNING: TO PREVENT FIRE OR ELECTRICAL SHOCK HAZARD, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.



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FIRST THINGS FIRST

UNPACK THE SYSTEM

Unpack the system and its accessories. You should have:

- one subwoofer
- two front speakers
- two surround speakers
- one center speaker with remote control sensor
- one remote control
- five speaker wires
- built-in cable for remote control

CHECK FOR MOISTURE

Just as moisture can form on the inside of windows on a cold day, it can also form on the inside of your stereo, causing it to malfunction. Some situations in which condensation might form include the following:

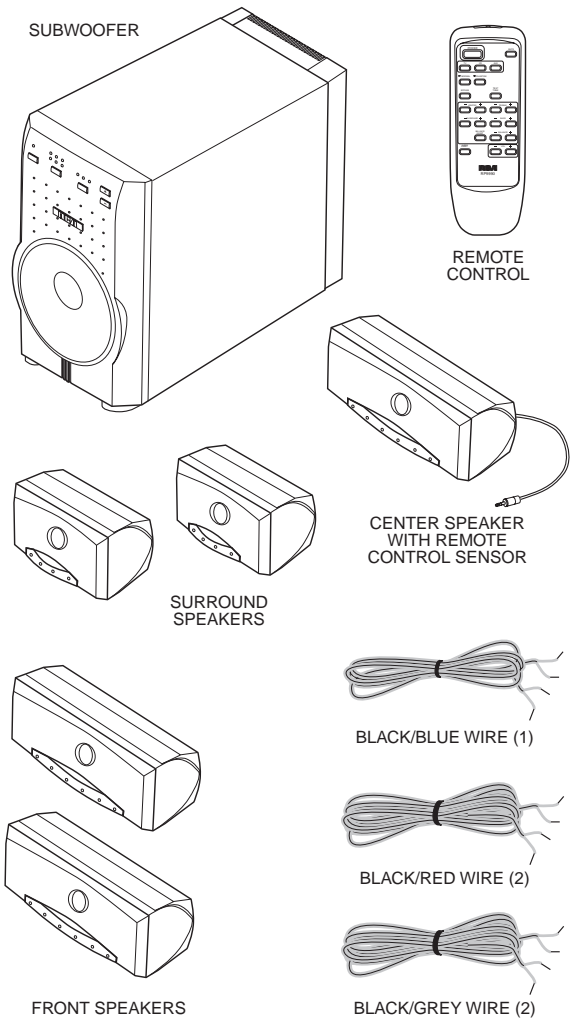
- Immediately after a heater has been turned on;
- In a steamy or very humid room;
- When the system is suddenly moved from a cold environment to a warm, moist one; for example, in moving the stereo from a cool air conditioned room to an outside porch on a humid, summer day.

If moisture forms inside the unit, it may not operate properly. To correct the problem, turn off the power and wait about 30 minutes for moisture to evaporate.

CHOOSE A LOCATION

These guidelines should be followed when deciding on a place to put your stereo system:

- Choose a level, solid, surface. Don't place it on a soft surface, such as carpeting or foam rubber.
- Choose a location away from direct sunlight, radiators, air ducts, and other sources of heat.
- Avoid locations that are subject to moisture, mechanical vibration, shock, or excessive dust.
- Make sure that the location has adequate air circulation. Good ventilation is essential to protect the system from internal heat build up.
- To avoid color interference, the unit should also be placed at least one to two feet from the television.



Be a Pack Rat

It is a good idea to keep the box and all of the packing materials your system came with in case you need to store, move or ship the unit at a later date.

SETTING UP THE SYSTEM

REAR PANEL CONNECTION

AUX

Connect the audio output (typically the AUX OUT) from an existing audio output amplifier or receiver here. Audio sources connected to the receiver or amplifier can be heard through the RP9990.

CD

Connect the audio output from a CD player here. The audio from the CD player can be heard through the TH900.

TV

Connect the audio output from a TV here. The audio from the TV can be heard through the TH900.

SURROUND SPEAKERS (8 OHM)

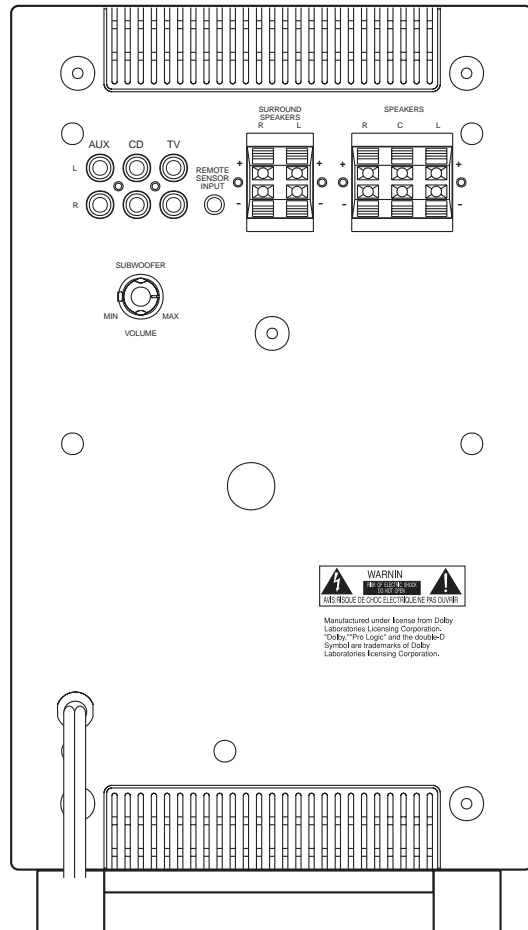
Connect the supplied Left and Right Surround Speakers here.

SPEAKERS R/C/L (4 OHM)

Connect the supplied Right and Center and Left Front Speakers here.

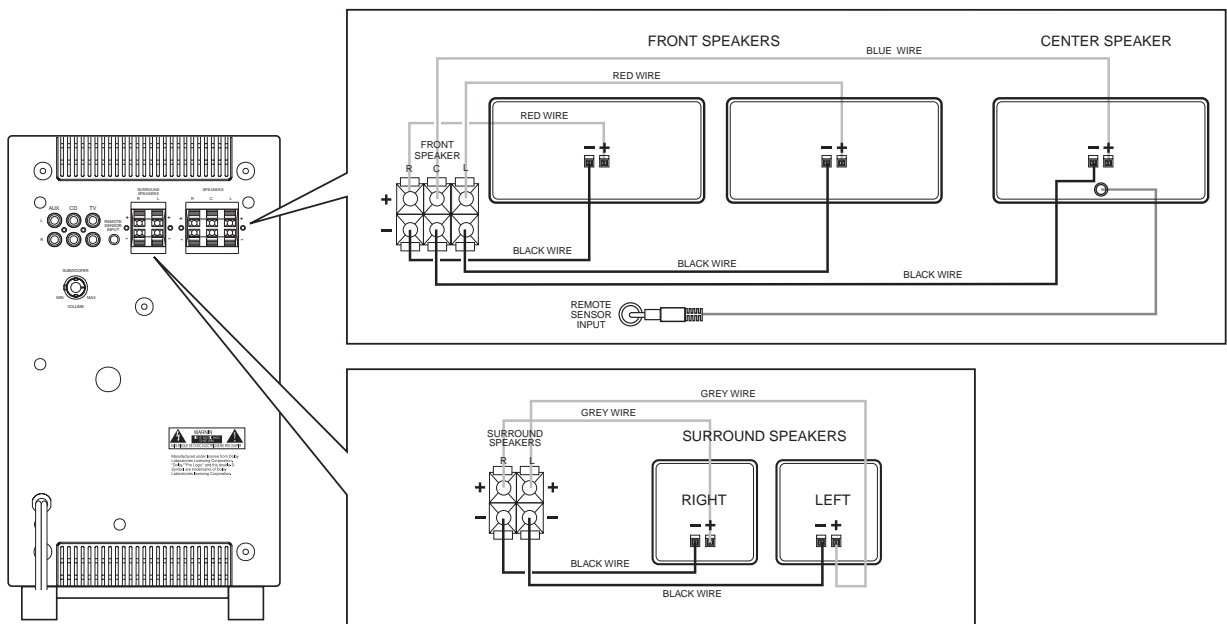
SUBWOOFER VOLUME CONTROL

You can adjust the subwoofer's output power by rotating the subwoofer volume control at the back of the unit.



SETTING UP THE SYSTEM

CONNECTING SPEAKERS



GENERAL HINTS FOR CONNECTING

1. At the rear of the speakers, you will find two quick-connect terminals: a black one marked (-) and a red one (for the Front Speaker) or a white one (for the Surround Speaker) or a blue one (for center speaker) marked (+).
2. Speaker wires are identified with different colors so that you can distinguish between them.
3. In order to prevent improper phasing between the speakers, be sure to make the same connection at both ends of the speaker wires (match the wire colors to the corresponding speaker terminals).
4. To connect the speaker wire, push and hold the speaker terminal tab down to insert the wire, release the tab to lock the wire in the terminal. Make sure the insulation is completely removed from the ends of the speaker wires at all connection points.

CONNECTING THE FRONT SPEAKERS

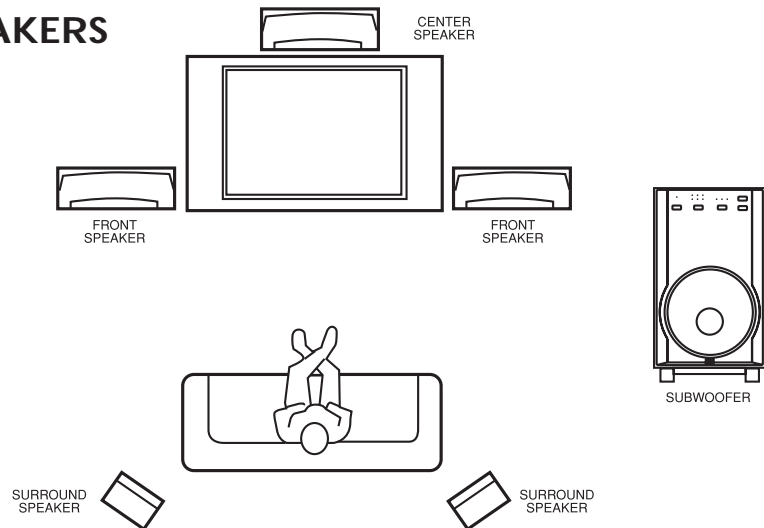
1. Connect the Right Front Speaker to the Front Speaker (R) terminals on the back of the main unit, and the Left Front Speaker to the Front Speaker (L) terminals. Center Front Speaker to the Front Speaker (C) terminals.
2. Make sure the (+) and (-) cables are connected to the correct Front Speaker terminals which are (+) to (+) and (-) to (-).
3. Plug the Remote Control Sensor wire into the REMOTE SENSOR INPUT on the back panel.

CONNECTING THE SURROUND SPEAKERS

1. Connect the Right Surround Speaker to the Surround Speaker (R) terminals at the back of the main unit, and the Left Surround Speaker to the Surround Speaker (L) terminals.
2. Make sure the (+) and (-) cables are connected to the correct Surround Speaker terminals which are (+) to (+) and (-) to (-).

SETTING UP THE SYSTEM

POSITIONING SPEAKERS



GENERAL HINTS FOR POSITIONING THE SPEAKERS

Avoid placing the speakers in a corner or on the floor, as this will accentuate the bass excessively.

Placing the speakers behind curtains, furniture or other obstacles will reduce the high-frequency response, thereby reducing the stereo effect considerably. For the best performance, the listener should have an unobstructed view of the speakers.

Each room has different acoustic properties and options for speaker placement are often limited. You can find the best position for your speakers by experimenting. In general, the speakers should be arranged as symmetrically as possible within the room.

POSITIONING THE CENTER SPEAKER

The Center Speaker should be placed centrally between the Front Speakers, e.g., underneath or on top of the TV. The best height for the Center Speaker is at ear level (while the listener is seated).

Do not put anything in front of the Center speaker to block the path of the Remote Control and affect the sensor performance.

POSITIONING THE FRONT SPEAKERS

The Front Speakers should be arranged so that, viewed from the listener's position, the speaker connected to the Front Speaker (L) terminals of the main unit is to the left and the speaker connected to

the Front Speaker (R) terminals is to the right of the listener. This can be checked with the balance control on the remote control.

The optimum height for the Front Speakers is attained when the high-frequency drivers (tweeters) are at ear level (while the listener is seated).

NOTE: To avoid magnetic interference with the picture on your TV, do not position the front speakers too close to the TV.

POSITIONING THE SURROUND SPEAKER

The Surround Speakers connected to the Surround Speaker (L) terminals of the main unit should be to the left of the listener and the speaker connected to the Surround Speaker (R) terminals should be to the right.

The Surround Speakers should face each other and be aligned with or behind the listener.

Using wall brackets, you can mount the Surround Speakers to the wall. The recommended mounting height is 5-6 feet from the floor.

CONNECTING FOR POWER

Plug the power cord into an AC power outlet.

GENERAL CONTROLS

FRONT PANEL DESCRIPTION

POWER ON/STANDBY

The power on/off function has two modes of operation:

1. Manual: Press the POWER button to turn the system on and off (When the POWER button is in the off (OUT) position, the system does not respond to commands from the remote control).
2. Remote ON/STANDBY: Press the POWER button to turn the system on. The system can then be turned off (and back on again) by remote control.

MUTE LED INDICATOR

1. The STANDBY/MUTE LED flashes when the audio muting is activated.

VOLUME (+/-)

Press the (+) or (-) button to adjust the Volume level up or down.

SURROUND MODE

Press to select the SURROUND MODE, and the LED indicator will light. The system will recall the previous Pro Logic mode: NORMAL, PHANTOM or BYPASS.

AUDIO SOURCE (TV/CD/AUX)

Press repeatedly to select the input source: AUX, TV, or CD. The corresponding LED indicator will light.

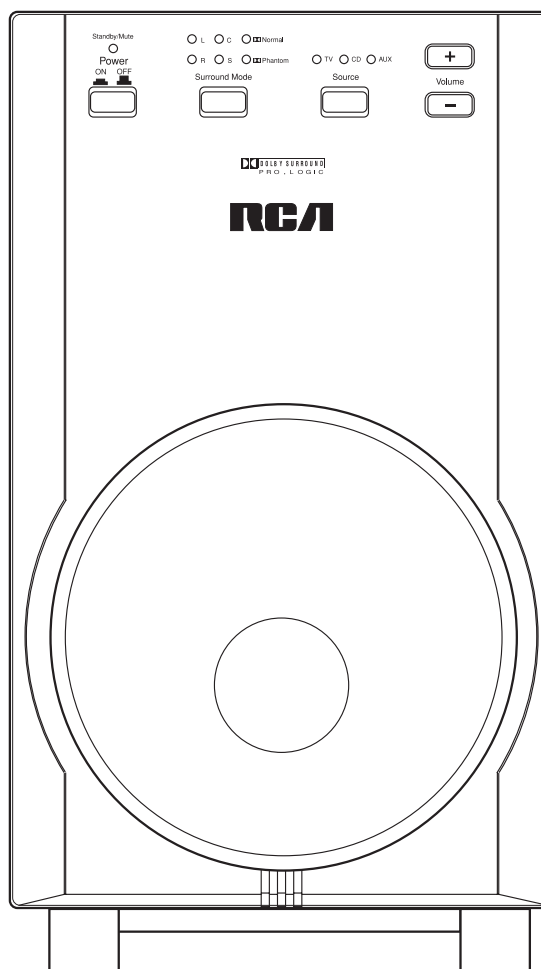
L, C, R, S. LED INDICATOR

When press remote control Test Tone Key in the Pro Logic normal mode, the LED will light in cycle: L-C-R-S-L.

When press remote control Test Tone Key in the Pro Logic Phantom mode, the LED will be light in cycle: L-R-S-L.

When in Bypass, the LED won't be lit.

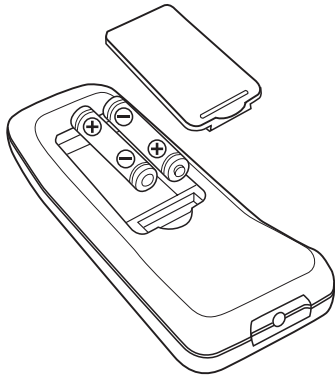
To cancel the TEST TONE function, press Surround Source button on the front panel or the remote control except the following: CENTER LEVEL (+)/(-), SURROUND (+)/(-), VOLUME (+)/(-) or BALANCE (+)/(-).



USING THE REMOTE CONTROL

BATTERY INSTALLATION

1. Open the battery compartment door.
2. Insert 2 AA-size batteries as indicated on the back of the remote control.
3. Close the battery compartment door.



GENERAL CONTROLS

POWER – When the system is in Standby mode, press the POWER button to switch unit ON or back to Standby.

MUTE – Press to mute on or off the sound.

TV – Select the TV input.


CD – Select the CD input.

AUX – Select the AUX input.

NORMAL CENTER – Select the Dolby Pro Logic Normal Center mode.

PHANTOM CENTER – Select the Dolby Pro Logic Phantom Center mode.

BYPASS – Press to select Bypass (2CH) mode.

TEST TONE – Press to begin the TEST TONE function while in  Pro Logic mode. Press any key to stop the TEST TONE function.

SURROUND +/- – To adjust the Surround level.

BALANCE +/- – To adjust the balance level.

BALANCE RESET – To reset the balance level.

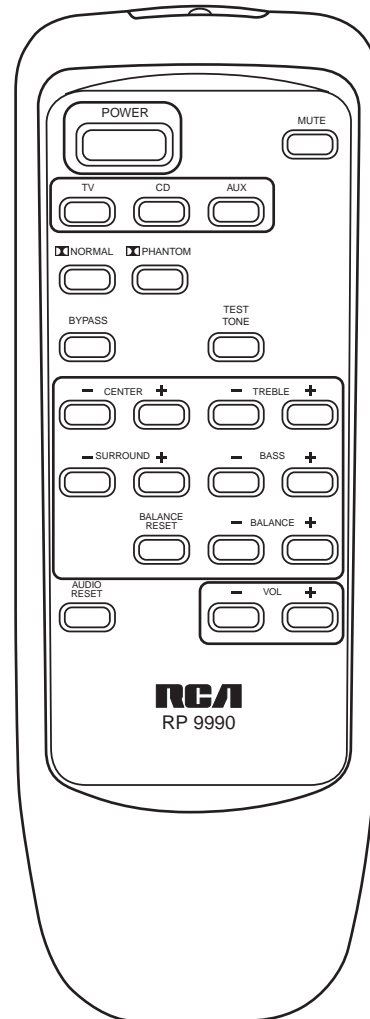
CENTER +/- – To adjust the Center level.

BASS +/- – To adjust the Bass level.

TREBLE +/- – To adjust the Treble level.

LEVEL RESET – To reset the audio level.

VOL +/- – To adjust the master volume level.



In Your Sights

The remote control works by line-of-sight, which means that for best results, you should aim the remote directly at the front of the Center Speaker.

USING THE SYSTEM

PRO LOGIC MODE

Choose this feature when playing movies and music encoded with Dolby Surround, such as Laser Disc, Video cassettes and certain compact discs. Many current TV broadcasts are also encoded with Dolby Surround Sound.

Pro Logic Sound, by adding a center channel speaker to the main and surround speakers, stabilizes the action occurring at the center of the screen. The Pro Logic system recaptures the full richness and depth of a Dolby Surround encoded film, for enjoyment in the comfort of your own home.

There are two different Center mode options when using the Pro Logic Feature:

NORMAL and PHANTOM.

NORMAL MODE

In the NORMAL mode, the low-frequency sounds occurring out of the center speaker would normally be routed to the right and left main speakers.

Because this system uses a subwoofer to produce most of the low-frequency sounds, the low-frequency sounds are directed to the subwoofer.

PHANTOM MODE

In the PHANTOM mode, all sound that would normally be routed to the CENTER channel speaker is routed equally to left and right main speaker. This creates the illusion that the sound is coming from the area centered between the main speakers. The CENTER SPEAKER is not used in this mode.

SELECTING THE PRO LOGIC MODE

1. Turn the main unit on and select the input SOURCE.
2. Press the SURROUND MODE button on front panel or the NORMAL CENTER button on the remote control.
3. Select the desired mode, NORMAL, PHANTOM and BYPASS by pressing SURROUND MODE on the front panel or the representative key on the remote control.
4. If the source is a Hi-Fi Stereo VCR or Laser Disc Player, play a Dolby Surround encoded material. Make sure the volume on the television is turned down completely, then adjust the volume on the main unit to the desired level.

TROUBLESHOOTING TIPS

<i>Problem</i>	<i>Solution</i>
System doesn't turn on	<ul style="list-style-type: none">• Make sure power cord is securely plugged into the AC power outlet.• Unplug the unit for a moment, and then plug it back in.• Check the outlet by plugging in another device.
No sound	<ul style="list-style-type: none">• Adjust volume setting.• Check for proper connection of speaker wires.• Make sure you've selected the correct function: AUX, TV or CD.• Make sure volume is not muted. To deactivate, press MUTE on the remote.
Remote control doesn't work	<ul style="list-style-type: none">• Make sure the audio system is plugged into a working AC outlet.• Make sure that the batteries are correctly installed in the remote control.• Make sure batteries in the remote are okay. Replace weak batteries..• Point the remote directly at the front of the center speaker's RCA logo while pressing the buttons.• Move closer to the unit with the remote control.• Make sure that there are no obstacles between the remote and the unit.• Make sure main unit power button is pressed into Standby mode.

EQUIPMENT SPECIFICATIONS

Operating Voltage	: 120 +/- 10% VAC 60 Hz
Left / Center / Right (at 4)	: 10 Watts / 10 Watts / 10 Watts 0.9% THD @ 1 KHz
Rear Surround (at 8)	: 5 Watts / 5 Watts 0.9% THD @ 1 KHz
Subwoofer Power	: 20 Watts
Muting Attenuation	: 50 dB
Frequency Response	: 40 - 20 KHz +/- 3 dB
Input Sensitivity	: 200 mV
Signal to Noise Ratio	: 60 / 65 dB @ 1 KHz
Cross Talk	: 60 dB @ 1 KHz

Specifications are based on nominal measurements

CARE AND MAINTENANCE

CLEANING THE EXTERIOR

Disconnect the system from AC power before cleaning the exterior of the system with a soft dust cloth.

NOTE: Do not use volatile solvents such as alcohol, paint thinner, gasoline or benzine, etc. to clean the unit.

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LIMITED WARRANTY

What your warranty covers:

- Any defect in materials or workmanship.

For how long after your purchase:

- One year. (The warranty period for rental units begins with the first rental or 45 days from date of shipment to the rental firm, whichever comes first.)

What we will do:

- Provide you with a new, or at our option, a refurbished unit.
- The exchange unit is under warranty for the remainder of the original product's warranty period.

How to make a warranty claim:

- Properly pack your unit. Include any cables, etc., which were originally provided with the product. We recommend using the original carton and packing materials.
- Remove cassette tapes or CDs from unit before shipping as there will not be returned.
- Include in the package evidence of purchase date such as the bill of sale. Also print your name and address and a description of the defect. Send standard UPS or its equivalent to:

Thomson Consumer Electronics, Inc.
Product Exchange Center
32B Spur Drive
El Paso, Texas 79906

- Pay any charges billed to you by the Exchange Center for service not covered by the warranty.
- Insure your shipment in case of loss of damage. Thomson accepts no liability in case of damage or loss.
- A new or refurbished unit will be shipped to you prepaid freight.

What your warranty does not cover:

- Customer instruction. (Your Owner's Manual provides information regarding operating instructions and user controls. For additional information, ask your dealer.)
- Installation and set-up service adjustments.
- Batteries.
- Damage from misuse or neglect.
- Products which have been modified or incorporated into other products.
- Products purchased or serviced outside the USA.
- Acts of God, such as but not limited to lightning damage.

Product Registration:

- Please complete and mail the Product Registration Card packed with your unit. It will make it easier to contact you should it ever be necessary. The return of the card is not required for warranty coverage.

How state law relates to this warranty:

- This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

If you purchased your product outside the USA:

- This warranty does not apply. Contact your dealer for warranty information.

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TBD
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